



MANITOBA WORKPLACE INJURY

STATISTICS REPORT FOR 2001-2002



**SAFE
WORK**

S
A
F
E

SPOT THE HAZARD
ASSESS THE RISK
FIND A SAFER WAY
EVERYDAY

Manitoba

Workplace Injury and Illness

Statistics Report For 2001 - 2002

November 2003

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EXECUTIVE SUMMARY

This is the first comprehensive report ever developed on the subject of workplace injuries and illnesses in Manitoba. This report is a joint initiative of the Workers Compensation Board of Manitoba and the Workplace Safety and Health Division of Manitoba Labour and Immigration and represents one component of their strategy to create a strong workplace safety and health culture in Manitoba. This report is being published to provide benchmarking data and other information that can be tracked over time.

This report contains two important breakthroughs. Firstly, it introduces the concept of the all-injury rate, which complements the time-loss injury rate. Secondly, using data from a variety of sources to capture all available data, it presents the first comprehensive picture of workplace fatalities in Manitoba. This is the first time this has been done in Manitoba or Canada.

Major highlights include:

- The time-loss injury rate has declined from a high of 5.8 in 2000 to 5.2 in 2001 and to 5.0 in 2002.
- The all-injury rate is approximately double the time-loss injury rate in all industries except mining (five times), transportation (less than double) and forestry (three times). This data suggests that even in industries where progress has been made in reducing time-loss injury rates, work remains to be done to reduce no time-loss injuries.
- Manufacturing continues to generate the largest number of claims, far out of proportion to the number of workers employed in the industry. Manufacturing contributes 17% of all workers, but generates around 35% of all claims. At 9.9 time-loss claims per 100 full-time equivalent workers, it also has the highest injury rate among industry sectors.
- Several industry sub-sectors have significantly higher time-loss injury rates than the provincial average. These include vehicle manufacturing (16.8%), meat processing (14.3), metalworking (14.2), wood manufacturing (11.2) and trucking (9.1).
- This report used all available sources to identify workplace fatalities. Not counting bystander deaths, 23 workers in 2000, 28 in 2001, and 17 in 2002 were killed as a result of exposures to acute hazards in the workplace. In addition, the WCB accepted 15 occupational disease claims in 2000, 14 in 2001, and 10 in 2002.
- A bystander is a person other than a worker who is killed as a result of exposure to a workplace hazard, but who was not working for or in that workplace at the time of death. Those authorities with the responsibility for recording workplace deaths are now beginning to identify bystander deaths. There were four bystander deaths in 2000, five in 2001 and sixteen in 2002. The rise in the number of bystander deaths is the result of better surveillance methods.
- Men are more likely to suffer a workplace injury or illness than women. In 2002, men reported 72% of accepted claims, and women reported 28%. Men are more likely to be

employed in higher-risk industries, while women are more likely to work in lower-risk industries and in uncovered industries.

- Reflecting the aging workforce, the typical injured worker is older than previously. In 2002, the average age of injured male workers was 37, and the average age of injured female workers was 39.
- More than half of all time-loss injuries are musculoskeletal injuries, with the majority being strains and sprains.
- Injuries to hands and fingers comprise a quarter of all injuries.

1.0 INTRODUCTION

This is the first comprehensive report ever developed on workplace injuries and illnesses in Manitoba. It has been generated using data obtained, for the most part, from the Workers Compensation Board of Manitoba (WCB) database of accepted claims. The section of this report on workplace fatalities also makes use of a variety of other sources. A report on workplace injuries and illnesses will be released annually as a complement to the WCB's annual report. Data presented in this report are for 2001 and 2002. Some additional data for other years is presented in the section on fatalities.

The development of this report represents one component of the Province of Manitoba's Workplace Safety and Health Injury Prevention Strategy. This strategy was introduced in 2002 by the Minister of Labour and Immigration and is a joint initiative of the WCB of Manitoba and the Workplace Safety and Health Division of Manitoba Labour and Immigration. Success in large part will depend on the actions of employers and workers to strengthen their own workplace prevention efforts. This report is being published to provide benchmarking data and information that can be tracked over time.

The injury statistics report contains three main sections:

1. Injury rates;
2. Workplace fatalities; and
3. Characteristics of injured workers and accepted claims.

The first major section of the injury statistics report contains information on injury rates per 100 full-time equivalent workers. Two rates are calculated: a time-loss injury rate and an all-injury rate. Each of these rates is sub-categorized by major industry sectors and selected sub-sectors. These particular sub-sectors have been chosen to profile major industry sectors.

The second section of the report discusses work-related fatalities. A wide variety of sources were contacted to pull together the first truly comprehensive picture of workplace fatalities in Manitoba.

The last section of the report presents the characteristics of WCB claimants and their claims. This knowledge is useful in helping effectively focus prevention efforts to reduce work-related injuries and illnesses.

2.0 INJURY RATES

2.1 Background

Two rates are developed here: the time-loss injury rate and the all-injury rate. The time-loss injury rate represents the number of time-loss claims per 100 full-time equivalent workers for WCB-covered industries. The all-injury rate represents the number of time-loss claims, no-time-loss claims, pensions and fatalities per 100 full-time equivalent workers for WCB-covered industries. Because *The Workers Compensation Act* does not cover the entire workforce (the *Act* covers about 70% of Manitoba workers), injury frequency data cannot be obtained for the whole workforce. Nevertheless, rates derived from WCB data serve as useful surrogate or proxy measures of the overall frequency of worker injuries.

The claims used to calculate these two rates were reported to the WCB in calendar years 2001 and 2002 (see table 2.1). Details about the specific definitions and formulas used to calculate the two rates are included in the section at the end of this report titled "terms and definitions".

Table 2.1.1 Population of Claims for 2001 and 2002 Used to Calculate Injury Rates

Type of Claims	Reported to WCB in 2001	Reported to WCB in 2002
Time-Loss Claims (includes time-loss, pension and fatalities)	18,919	18,278
No-Time-Loss Claims	18,114	17,322
Total All Claims	37,033	35,600

2.2 Time-Loss Injury Rate

Manitoba's time-loss injury rate declined from a high of 5.8 time-loss injuries per 100 full-time equivalent workers in 2000 to 5.2 in 2001 and to 5.0 in 2002, a decline of 14% in the rate. While this improvement is encouraging, employers, workers, government and the WCB will need to continue injury and illness prevention efforts if further reductions are to be realized. These reductions can be partly attributed to several factors: improved prevention efforts of Manitoba employers and workers, public awareness surrounding the review of *The Workplace Safety and Health Act*, changes to the WCB rate model/experience rating system that created a financial incentive for employers to prevent injuries, improved inspection and enforcement, a ten-fold increase in fines under *The Workplace Safety and Health Act in 1998*; and focused inspections of high-hazard workplaces undertaken by the inspectors of the Workplace Safety and Health Division.

In April 2002, the Minister of Labour and Immigration announced the Government of Manitoba's endorsement of the Workplace Safety and Health Review Committee's target of reducing the time-loss injury rate by 25% over 5 years. The Government of Manitoba and the Workers Compensation Board will spearhead initiatives to build a stronger workplace safety and health culture in Manitoba. They will focus their activities in four priority areas: creating public awareness and education, training employers and supervisors, improving prevention measures and standards and enhancing the internal and external responsibility systems.



Figure 2.2.1 Manitoba Time-Loss Injury Rates 1994 - 2002

2.2.1 Industry and Sub-Industry Rates

Table 2.2.1 details the time-loss injury rate of major industry sectors and selected sub-sectors for 2001 and 2002. It shows that:

- the manufacturing sector has the highest time-loss injury rate (10.8 in 2001 and 9.9 in 2002) of all industry sectors
- Within manufacturing, vehicle manufacturing (25.6 in 2001 and 16.8 in 2002), agricultural implement manufacturing (15.3 in 2001 and 14.9 in 2002), meat processing (15.4 in 2001 and 14.3 in 2002) and metalworking (14 in 2001 and 14.2 in 2002) had particularly high rates.
- The construction industry has the second highest rate among industry sectors (9.1 in 2001 and 8.8 in 2002).
- The trucking sub-sector showed no improvement over the two years, remaining at 9.1.

Table 2.2.1 Time-Loss Injury Rate by Major Industry Sector and Selected Sub-Sectors for 2001 and 2002

Industry Sub-Sectors	2001		2002		2001	2002
	Time-Loss Injuries	Number of FTE ¹ Workers	Time-Loss Injuries	Number of FTE Workers	Time-Loss Injury Rate	Time-Loss Injury Rate
Forestry	29	400	28	400	7.8	7.5
Mining, Quarrying & Oil Wells	131	4,700	119	4,500	2.8	2.6
• <i>Mining</i>	87	3,700	77	3,500	2.4	2.2
Manufacturing	6,687	62,200	6,063	61,300	10.8	9.9
• <i>Meat Processing</i>	482	3,100	497	3,500	15.4	14.3
• <i>Metal Works</i>	821	5,900	828	5,800	14.0	14.2
• <i>Vehicle Manufacturing</i>	940	3,700	538	3,200	25.6	16.8
• <i>Agricultural Implement Manufacturing</i>	645	4,200	645	4,300	15.3	14.9
• <i>Wood Manufacturing</i>	1,182	9,000	1,097	9,800	13.1	11.2
• <i>Printing</i>	208	5,500	259	5,500	3.8	4.7
• <i>Clothing Manufacturing</i>	184	5,300	177	4,900	3.5	3.6
• <i>Aircraft Manufacturing and Repair</i>	233	4,100	193	3,700	5.7	5.3
Construction	1,471	16,200	1,568	17,900	9.1	8.8
• <i>Building Construction</i>	1,229	13,000	1,299	14,900	9.5	8.7
• <i>Heavy Construction</i>	242	3,300	269	3,100	7.3	8.6
Transportation, Communication and Storage	1,271	40,300	1,281	40,400	3.2	3.2
• <i>Trucking</i>	815	8,900	814	8,900	9.1	9.1
Trade	2,741	66,000	2,658	68,900	4.2	3.9
• <i>Supermarket & Department Stores</i>	1,441	43,700	1,414	45,100	3.3	3.1
Service	3,614	87,600	3,679	89,800	4.1	4.1
• <i>Accommodation and Restaurants</i>	881	29,700	761	29,700	3.0	2.6
• <i>Healthcare</i>	2,336	45,500	2,502	48,700	5.1	5.1
Public Administration	142	3,200	165	3,000	4.4	5.5
Voluntary	953	35,600	920	37,600	2.7	2.4
• <i>Agriculture</i>	122	2,300	125	2,600	5.2	4.9
• <i>Educational Institutions</i>	378	14,500	394	14,900	2.6	2.6
Self Insurers	1,875	54,600	1,769	52,800	3.4	3.4
Overall	18,919	362,000	18,278	367,623	5.2	5.0

Source: WCB Claim and Employer Databases and Statistics Canada Survey of Employment, Payrolls and Hours

¹ Full-time equivalent workers based on Statistics Canada average wage and WCB payroll data.

2.3 *All-Injury Rate*

The all-injury rate is derived from the population of all accepted claims (time-loss, no-time-loss, pensions and fatalities). The ratio of time-loss to no-time-loss claims in most industry sectors is one to one. As a result, in most industries the all-injury rate is approximately double the time-loss injury rate. As a result of the specific hazards to which their workers are exposed at work, certain industry sub-sectors have a higher number of no-time-loss injuries than their industries as a whole. For example, the all-injury rate in the metal-working sub-sector of manufacturing is more than double the all-injury rate of the industry as a whole (this sector has many no-time-loss injuries due to eye injuries caused by dust and metal fragments from grinding), and the all-injury rate in the meat-processing sub-sector (where many no-time-loss injuries are due to cuts to hands) is almost triple.

The all-injury rate in the mining industry is almost 5 times the time-loss rate. This, in part, highlights the success of the mining sector's injury-prevention efforts and also the effectiveness of large mining companies' mature disability-management programs which encourage workers to immediately return to work after an injury. In the mining sector, only the most serious injuries are recorded as time-loss, while the less serious remain no-time-loss as workers can return to their regular duties or to a modified job after injury. The challenge remains for the mining sector to achieve reductions in no time-loss injuries.

All-Injury Rate and Time-Loss Injury Rate for WCB Industry Sectors for 2002

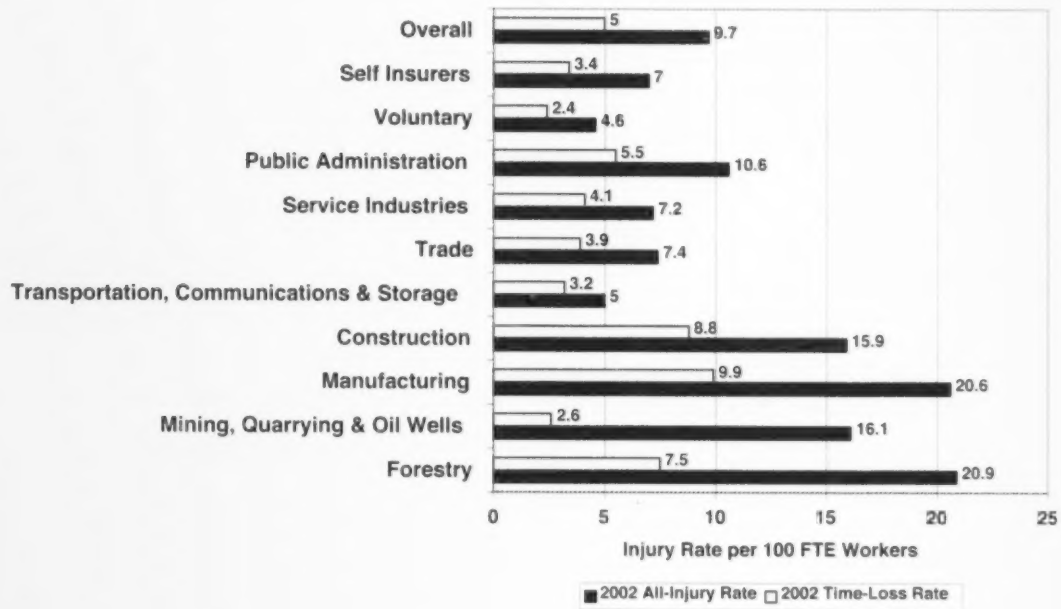


Figure 2.3.1 All-Injury Rate and Time-Loss Injury Rate for 2002

**Table 2.3.1 All-Injury Rates By Sub-Sector (per 100 Full-time Equivalent Workers)
for 2001 and 2002**

Sub-Sectors	2001		2002		2001	2002
	All Injuries	Number of FTE Workers	All Injuries	Number of FTE Workers	All-Injury Rate	All-Injury Rate
Forestry	64	400	78	400	17.3	20.9
Mining, Quarrying and Oil Wells	888	4,700	724	4,500	19.1	16.1
• <i>Mining</i>	<i>751</i>	<i>3,700</i>	<i>619</i>	<i>3,500</i>	<i>20.4</i>	<i>17.9</i>
Manufacturing	13,648	62,200	12,624	61,300	21.9	20.6
• <i>Meat Processing</i>	<i>1,372</i>	<i>3,100</i>	<i>1,510</i>	<i>3,500</i>	<i>43.8</i>	<i>43.4</i>
• <i>Metal Works</i>	<i>1,834</i>	<i>5,900</i>	<i>1,777</i>	<i>5,800</i>	<i>31.3</i>	<i>30.5</i>
• <i>Vehicle Manufacturing</i>	<i>1,487</i>	<i>3,700</i>	<i>957</i>	<i>3,200</i>	<i>40.6</i>	<i>29.8</i>
• <i>Agricultural Implement Manufacturing</i>	<i>1,303</i>	<i>4,200</i>	<i>1,299</i>	<i>4,300</i>	<i>30.9</i>	<i>29.9</i>
• <i>Wood Manufacturing</i>	<i>2,511</i>	<i>9,000</i>	<i>2,357</i>	<i>9,800</i>	<i>27.8</i>	<i>24.0</i>
• <i>Printing</i>	<i>379</i>	<i>5,500</i>	<i>443</i>	<i>5,500</i>	<i>6.8</i>	<i>8.0</i>
• <i>Clothing Manufacturing</i>	<i>295</i>	<i>5,300</i>	<i>278</i>	<i>4,900</i>	<i>5.6</i>	<i>5.7</i>
• <i>Aircraft Manufacturing and Repair</i>	<i>425</i>	<i>4,100</i>	<i>359</i>	<i>3,700</i>	<i>10.4</i>	<i>9.8</i>
Construction	2,768	16,200	2,836	17,900	17.0	15.9
• <i>Building Construction</i>	<i>2,334</i>	<i>13,000</i>	<i>2,328</i>	<i>14,900</i>	<i>18.1</i>	<i>15.6</i>
• <i>Heavy Construction</i>	<i>434</i>	<i>3,300</i>	<i>508</i>	<i>3,100</i>	<i>13.1</i>	<i>16.3</i>
Transportation, Communication and Storage	2,125	40,300	2,034	40,400	5.3	5.0
• <i>Trucking</i>	<i>1,269</i>	<i>8,900</i>	<i>1,188</i>	<i>8,900</i>	<i>14.1</i>	<i>13.3</i>
Trade	5,224	66,000	5,106	68,900	7.9	7.4
• <i>Supermarket & Department Stores</i>	<i>2,656</i>	<i>43,700</i>	<i>2,614</i>	<i>45,100</i>	<i>6.1</i>	<i>5.8</i>
Service	6,446	87,600	6,428	89,800	7.4	7.2
• <i>Accommodation and Restaurants</i>	<i>1,875</i>	<i>29,700</i>	<i>1,662</i>	<i>29,700</i>	<i>6.3</i>	<i>5.6</i>
• <i>Healthcare</i>	<i>3,945</i>	<i>45,500</i>	<i>4,116</i>	<i>48,700</i>	<i>8.7</i>	<i>8.5</i>
Public Administration	293	3,200	320	3,000	9.1	10.6
Voluntary	1,699	35,600	1,744	37,600	4.8	4.6
• <i>Agriculture</i>	<i>211</i>	<i>2,300</i>	<i>211</i>	<i>2,600</i>	<i>9.1</i>	<i>8.3</i>
• <i>Educational Institutions</i>	<i>670</i>	<i>14,500</i>	<i>747</i>	<i>14,900</i>	<i>4.6</i>	<i>5.0</i>
Self Insurers	3,801	54,600	3,680	52,800	7.0	7.0
Overall	37,033	362,000	35,600	367,623	10.2	9.7

Full-time equivalent workers based on Statistics Canada average wage and WCB payroll information.
All injuries include No-Time-Loss and Time-Loss claims.

3.0 FATALITIES

This section provides summary information on workplace fatalities in Manitoba. Manitoba workplaces are diverse in nature, ranging from underground mining operations and manufacturing plants to construction sites—just to name a few. Depending on the nature of the workplace, workers can be exposed to a wide array of risks and hazards, and their risk of death from exposure to hazards varies widely.

This report provides statistics on workers who died as a result of a workplace incident as well as bystanders who were fatally injured. (A bystander is a person exposed to hazards at the worksite but who was not actually a worker at the time of the incident. A child killed on a farm, for example, is classified as a bystander.) Information on who is included in this analysis is located at the end of this report.

Because persons involved in fatal workplace incidents may or may not have been working in workplaces covered by *The Workers Compensation Act*, a variety of sources other than WCB data were used to develop this section. Fatalities accepted by the WCB are a subset of the work-related fatalities that occur in Manitoba each year. The Workplace Safety and Health Division maintains a database for tracking the occurrence of work-related fatalities in Manitoba workplaces. This fatality surveillance system gathers information on fatalities from the Division, the WCB, the Chief Medical Examiner's Office, Manitoba Department of Highways, and the Royal Canadian Mounted Police. This database allows the tracking of deaths occurring in workplaces such as family farms that are not covered under *The Workers Compensation Act*.

The fatalities in this report are arranged in several ways. One is through tables that report fatalities by industry sectors. Another is by the jurisdiction that has responsibility for the inspection and regulation of safety-and-health activities. (In Manitoba, about 90% of workers are regulated by the Workplace Safety and Health Division. Others fall under the jurisdiction of the federal government and are regulated for safety and health by Human Resources Development Canada.) Another way is to sort fatalities by the cause of death, including whether deaths were the result of traumatic events or systemic disease.

**Table 3.1 Totals of Acute Hazard and Occupational Disease Deaths
for 2000 to 2002**

Year	2000	2001	2002
Acute Hazard Exposure Deaths	23	28	17
Occupational Disease Deaths Accepted by the WCB	15	14	10
Total	38	42	27

Table 3.1 displays the total numbers of acute hazard fatalities and occupational disease fatalities for the years 2000 through 2002.

3.1 Acute Hazard/Traumatic Fatalities

Table 3.2 displays as complete a picture as possible of all acute-hazard work-related deaths in Manitoba for 2000 through 2002.

Table 3.2 Categorization of Acute-Hazard Exposure Fatalities by Jurisdiction

Acute-Hazard Exposure Deaths				
		2000	2001	2002
Provincial Jurisdiction Total		14	17	12
• Farm		7	3	1
• Construction		1	6	6
• Mining		2	0	0
• Logging		0	1	0
• Manufacturing		2	0	1
• Other Industry		2	4	2
• Commercial Fishing * Provincial in 2000 (previously Federal)		0	3	2
Federal Jurisdiction Total		9	11	5
• Ground Transportation (interprovincial trucking and rail transport)		8	5	5
• Air Transportation		1	4	0
• Police and security		0	2	0
• Other		0	0	0
By-stander / Non-worker		4	5	16

3.1.1 Agricultural Industry Fatalities

Farming is a very specialized industry, with its own unique hazards. Over the past 20 years, approximately one-half of the acute-hazard and traumatic-exposure deaths in workplaces regulated by the Workplace Safety and Health Division have occurred on farms. Farm-related deaths are distributed across all age groups. One-half of the deaths occurred in the 15-59 year age group, and the remaining half were split between children (12% were under the age of 7 years) and those 60 years and older (37%). The farm is the only workplace that regularly permits the presence of children. The last two years, however, have seen a marked decline in farm fatalities.

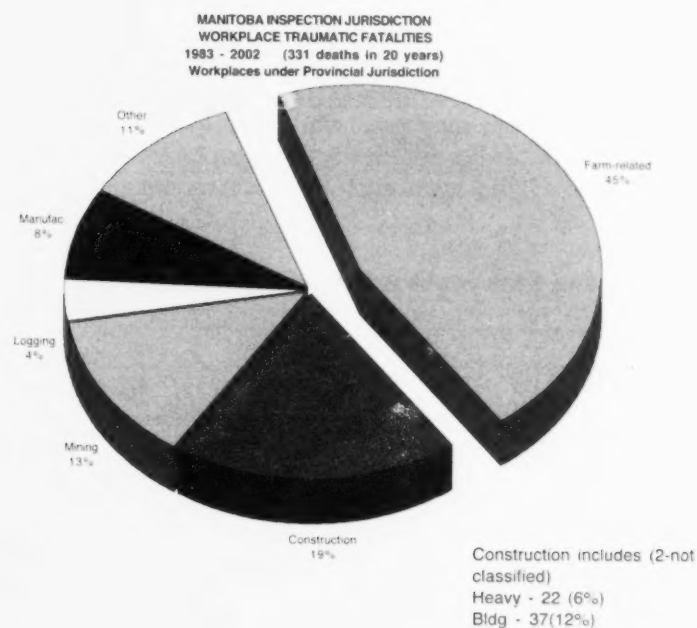


Figure 3.1 Traumatic Fatalities for the Manitoba Workplace Safety and Health Division Regulatory Inspection Jurisdiction 1983-2002

3.2 Occupational Disease Fatalities

Table 3.3 outlines fatalities from diseases (e.g., asbestos-related cancers) that resulted from exposures to toxic substances in workplaces and that were accepted by the WCB. Work-related diseases represent a growing area of concern in Manitoba workplaces. While cancers from exposures to asbestos remain significant, cancers from other exposures (e.g., cancers among firefighters from inhaling toxic smoke) are growing.

These claims are grouped by the year in which the illnesses were reported to the WCB. This may not be the same as the year of death. Fatalities caused by diseases may not be reported to the WCB until long after the workers have died. This is especially the case when *The Workers Compensation Act* is revised to grant new entitlements to workers. For example, the amendments made to the *Act* in 2002 that recognized certain cancers as hazards of firefighting produced a large number of new claims involving workers who had already succumbed to these diseases. It is not possible at this time to identify work-related diseases for industries that are not covered by *The Workers Compensation Act*.

Many diseases develop slowly over time, while the exposures to hazardous agents that eventually cause death occurring decades before. An exception to this scenario would be an acute toxic exposure to a lethal agent such as carbon monoxide (by inhalation) or pesticides (by ingestion).

Table 3.3 Diseases and Conditions Accepted by the WCB

Disease Conditions	Accepted by WCB in 2000	Accepted by WCB in 2001	Accepted by WCB in 2002
• Obstructive Lung Disease	0	1	0
• Pulmonary Fibrosis	1	0	0
• Asbestosis	2	0	0
• Silicosis	0	0	0
• Mesothelioma (asbestos)	4	11	6
• Cancer, other	2	2	4
• Myocardial Infarction	3	0	0
• Other	3	0	0
Total	15	14	10 ²

² Changes to *The Workers Compensation Act* in 2002 recognized the link between firefighting and certain cancers. In July 2003, 12 files were still under adjudication. Their status with regard to acceptance is not known at report time. They include 1 mesothelioma, 9 cancers, 1 aneurysm and 1 myocardial infarction.

3.3 *Bystander Fatalities*

Bystander deaths (Table 3.4) occur in Manitoba workplaces as the result of contact with or exposure to hazards in those work environments. Although the victims are not employees, they die from exposure to the same hazards that workers are exposed to. Safety-and-health legislation directs employers to ensure the safety and well-being of people at the worksite, whether or not they are workers. It is important to note that the apparent increase in the number of bystander fatalities in 2002 was due to better surveillance methods.

Table 3.4 Bystanders, by type of event and workplace

Bystanders and Non-Workers, killed by workplace hazards.			
Type of Event	2000	2001	2002
• <i>Highway crash</i>	<i>1</i>	<i>2</i>	<i>11</i>
• <i>Transportation, other (incl. pedestrian)</i>	<i>1</i>	<i>0</i>	<i>3</i>
• <i>Fall from one level to another</i>	<i>0</i>	<i>2</i>	<i>0</i>
• <i>Struck by an object</i>	<i>0</i>	<i>0</i>	<i>1</i>
• <i>Carbon monoxide poisoning</i>	<i>0</i>	<i>0</i>	<i>1</i>
• <i>Drowning</i>	<i>2</i>	<i>1</i>	<i>0</i>
Total	4	5	16

3.4 *Source and Cause of Fatalities*

Table 3.5 outlines some additional details on the source of injuries causing fatalities among the WCB-covered workforce. Table 3.6 provides details on the events causing deaths among WCB-covered workers.

**Table 3.5 WCB Accepted Fatalities by Detailed Source for Year Accepted 2001
and 2002**

Source of Fatality	2001		2002	
	Number	Percent	Number	Percent
Asbestos	11	44.0%	7	36.8%
Bodily conditions of injured, ill worker	1	4.0%	0	0%
Beams	0	0%	1	5.3%
Branches, limbs	1	4.0%	0	0%
Compactors, crushers, pulverizers- earth, mineral	0	0%	1	5.3%
Construction, logging, and mining machinery, unspecified	1	4.0%	0	0%
Fire, flame	1	4.0%	0	0%
Floors, walkways, ground surfaces	0	0%	1	5.3%
Grain, grain mill products	1	4.0%	0	0%
Highway vehicle, unspecified	1	4.0%	0	0%
Knives	1	4.0%	0	0%
Liquids n.e.c.	0	0%	1	5.3%
Loaders	0	0%	1	5.3%
Nonmetallic minerals, except fuel, unspecified	1	4.0%	0	0%
Organochlorine compounds	1	4.0%	0	0%
Other machinery Unspecified	0	0%	1	5.3%
Person other than injured or ill worker	0	0%	1	5.3%
Semi trailer, tractor trailer, trailer truck	1	4.0%	1	5.3%
Truck, unspecified	2	8.0%	0	0%
Unknown	1	4.0%	3	15.8%
Wheels, tire rims	1	4.0%	0	0%
Wood Chips, sawdust	0	0%	1	5.3%
Total	25	100%	19	100%

Table 3.6 WCB Accepted Fatalities by Detailed Event for Year Accepted 2001 and 2002

Event Causing Fatality	2001		2002	
	Number	Percent	Number	Cumulative Percent
Struck by objects	4	16.0%	1	5.3%
caught in objects	0	0%	3	15.8%
Fall from height	0	0%	1	5.3%
Transportation incidents	4	16.0%	1	5.3%
Exposure to harmful substances	14	56.0%	9	47.4%
Assaults and violent acts by persons	1	4.0%	1	5.3%
Fires and explosions	1	4.0%	0	0%
Event unknown/missing	1	4.0%	3	15.8%
Total	25	100%	19	100%

4.0 WORKPLACE INJURY AND DISEASE ANALYSIS

This section presents the characteristics of workers whose injuries occurred in 2001 or 2002 and whose claims were accepted by the Manitoba WCB. The claims selected for analysis in this section include accepted time-loss claims (claims where wages were lost and replaced, or where there was a fatality or an impairment award) and no time-loss claims.

Not all characteristics are known for all claim populations. For example, information regarding the type of injury or the circumstances surrounding the injury event are only coded for time-loss claims, while characteristics such as gender and age are coded for all accepted claims.

Table 4.1 Population of Claims Statistics for Accident Years 2001 and 2002

	Accident Year³ 2001	Accident Year 2002
Time-Loss Claims (includes time-loss, pension and fatalities)	18,593	17,869
No-Time-Loss Claims	17,844	16,974
Total All Claims	36,437	34,843

Injury prevention activities can be enhanced by knowing who is at risk. The next sections of the report provide information about workers who are likely to be at risk, along with their ages, gender, types of jobs, and the industries in which they are employed at time of injury.

4.1 Gender (All Accepted Claims)

In 2002 male workers submitted 72% of accepted claims, while female workers reported 28%. No gender was recorded in a small number of claims. The percentage of claims from men and women is somewhat different from the percentage of workers employed by gender.⁴ In 2002, 57% of workers were men and 43% were women. This suggests that men are somewhat over represented in the injury claim statistics.

Several reasons help explain the overrepresentation of men in the accepted claim statistics. One of the most important is that men are more likely to work in the more hazardous jobs in the primary and goods-producing sectors that have the worst hazards and highest injury rates.

³ Accident year claims data is used to develop the characteristics of claimants and claims.

⁴ Statistics Canada Labour Force Survey

Women are more likely to work in lower-risk jobs in the service sector, and in industries not covered by the WCB.

In four industry sectors in 2001 and 2002 (mining, forestry, construction and transportation/communication), men reported more than 90% of all accepted claims. In manufacturing, men reported more than 80%. Women reported more claims than men (more than 70%) only in the service sector.

Table 4.1.1 Accepted Claims by Gender for Accident Year 2001 and 2002 (All Claims Not Specifically Rejected⁵)

Gender	2001		2002	
	Number of Claims	Percent	Number of Claims	Percent
Female	9,980	27.6%	9,798	28.3%
Male	26,244	72.4%	24,867	71.7%
Gender Unspecified	213	-	178	-
Total	36,437	100%	34,843	100%

⁵ Claims not specifically rejected include time loss claims, no time loss claims, pension claims and fatalities.

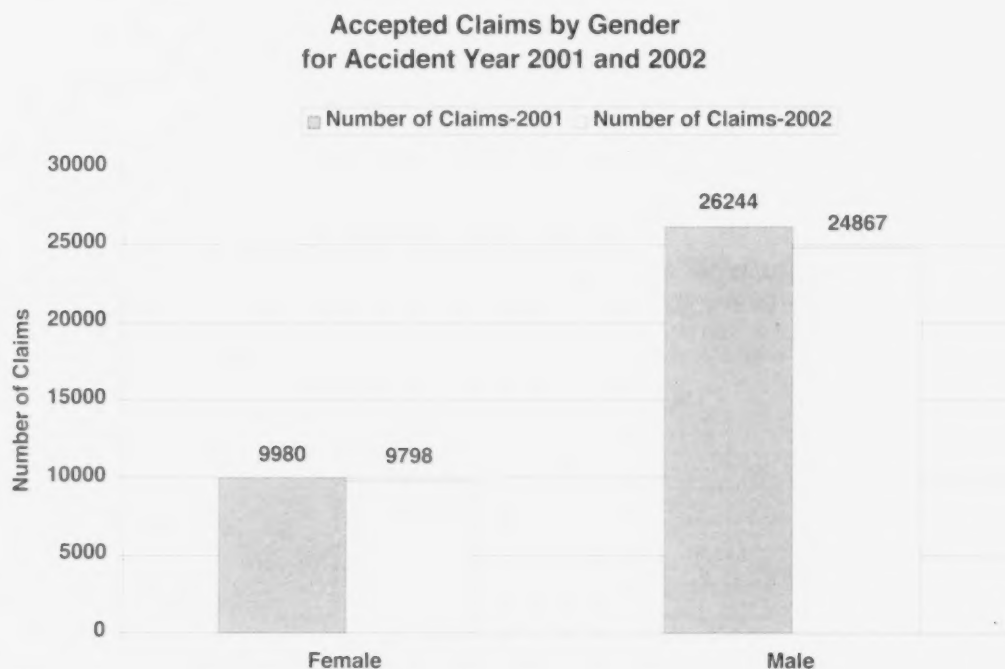


Figure 4.1.1 Number of Accepted Claims by Gender 2001 and 2002

4.2 Age Group (All Accepted Claims)

One might assume that workers of each age group would suffer workplace injuries and illnesses in the same proportion as their share of the workforce. This is not always the case. Younger workers are more likely to experience an accident or illness than their numbers suggest, while older workers are less likely to do so.

In 2002, young workers (those under the age of 25) comprised 17% of the labour force and 18% of claimants. Workers between the ages of 25 and 34 made up 22% of the labour force, but 24% of claimants, while workers between the ages of 35 and 44 made up 26% of the labour force and 28% of claimants. However, workers between the ages of 45 and 54 made up 23% of the labour force in 2002 but only 20% of claimants and those 55 years of age and older were 13% of the labour force but only 9% of claimants.

In 2002 the average age of female claimants was 39. More claims come from older women as they are concentrated in service sector jobs such as in health care, where there is an aging workforce. For men, the average age was 37.

Claims by age group are summarized in table 4.2.1

All Accepted Claims Distribution by Age Group and Employment for 2002



Figure 4.2.1 All Accepted Claims Distribution by Age and Employment for 2002

Table 4.2.1 Accepted Claims by Age Group for Accident Year 2001 and 2002 (All Accepted and Unadjudicated Claims)

Age Groups	2001		2002	
	Frequency	Percent	Frequency	Percent
14-19	1826	5.1%	1765	5.1%
20-24	4737	13.2%	4372	12.8%
25-34	9030	25.1%	8290	24.2%
35-44	10267	28.5%	9715	28.3%
45-54	7082	19.7%	6991	20.4%
55+	3036	8.4%	3142	9.2%
Not Coded	459	-	568	-
Total	36,437	100%	34,843	100%

Accepted Claims by Age Group and Gender for Accident Year 2002

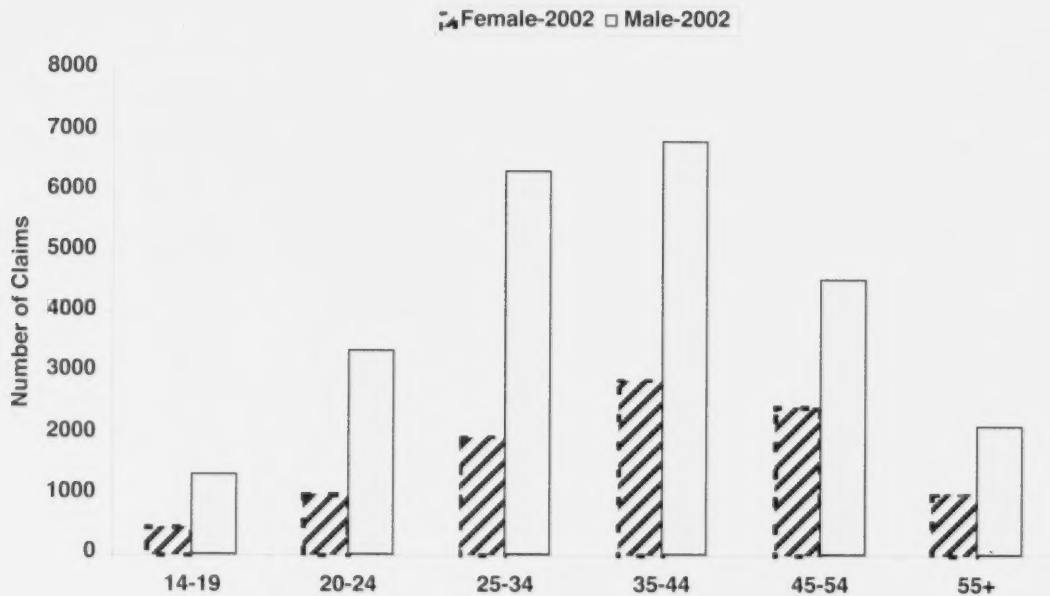


Figure 4.2.2 Accepted Claims by Age Group and Gender for Accident Year 2002

4.3 Accepted Time-Loss and No-Time-Loss Claims by Industry Sector

The industry groupings in this section are developed from WCB rate code groups (employer risk categories), rather than Standard Industrial Classification or the North American Industry Classification System codes. The manufacturing sector had the largest share of accepted claims in 2001 (37%) and in 2002 (36%). This is far disproportionate to manufacturing's share of covered workers (17%).

The service sector experienced 16% of the no-time-loss claims and 20% of the time-loss claims in 2002. The construction sector had 7% of the no-time-loss and 9% of the time-loss claims in 2002, while transportation, communication and storage had roughly 5% of no-time-loss and 7% of time-loss claims in 2002.

While the mining sector had about 4% of all no-time-loss claims, it only had 1% of the time-loss claims in both 2001 and 2002.

This industry data suggests that prevention efforts should focus on manufacturing, as well as sectors such as health care that have a large number of claims and higher injury rates.

Table 4.3.1 Accepted Claims by WCB Industry Group for Accident Year 2001 and 2002 (All Accepted and Unadjudicated Claims)

WCB Industry Group	2001			2002		
	No Time-loss	Time-loss	All claims	No Time-loss	Time-loss	All Claims
Forestry	35 (0.2%)	28 (0.2%)	63 (0.2%)	48 (0.3%)	28 (0.2%)	76 (0.2%)
Mining	769 (4.3%)	124 (0.7%)	893 (2.5%)	597 (3.5%)	107 (0.6%)	704 (2.0%)
Manufacturing	6,883 (38.6%)	6,598 (35.5%)	13,481 (37.0%)	6,482 (38.2%)	5,958 (33.3%)	12,440 (35.7%)
Construction	1,276 (7.2%)	1,450 (7.8%)	2,726 (7.5%)	1,249 (7.4%)	1,536 (8.6%)	2,785 (8.0%)
Transportation, Communications and Storage	836 (4.7%)	1,237 (6.7%)	2,073 (5.7%)	731 (4.3%)	1,265 (7.1%)	1,996 (5.7%)
Trade	2,457 (13.8%)	2,692 (14.5%)	5,149 (14.1%)	2,409 (14.2%)	26,071 (14.6%)	5,016 (14.4%)
Service	2,801 (15.7%)	3,565 (19.2%)	6,366 (17.5%)	2,690 (15.9%)	3,606 (20.2%)	6,296 (18.1%)
Public Service	147 (0.8%)	140 (0.8%)	287 (0.8%)	151 (0.9%)	156 (0.9%)	307 (0.9%)
Voluntary	732 (4.1%)	934 (5.0%)	1,666 (4.6%)	806 (4.8%)	905 (5.1%)	1,711 (4.9%)
Self Insured	1,881 (10.6%)	1,824 (9.8%)	3,705 (10.2%)	1,803 (10.6%)	1,700 (9.5%)	3,503 (10.1%)
Missing/ Not Coded	27	1	28	8	1	9
Total	17,844 (100%)	18,593 (100%)	36,437 (100%)	16,974 (100%)	17,869 (100%)	34,843 (100%)

WCB Industry Group- All Injuries and All Injury Rate 2002

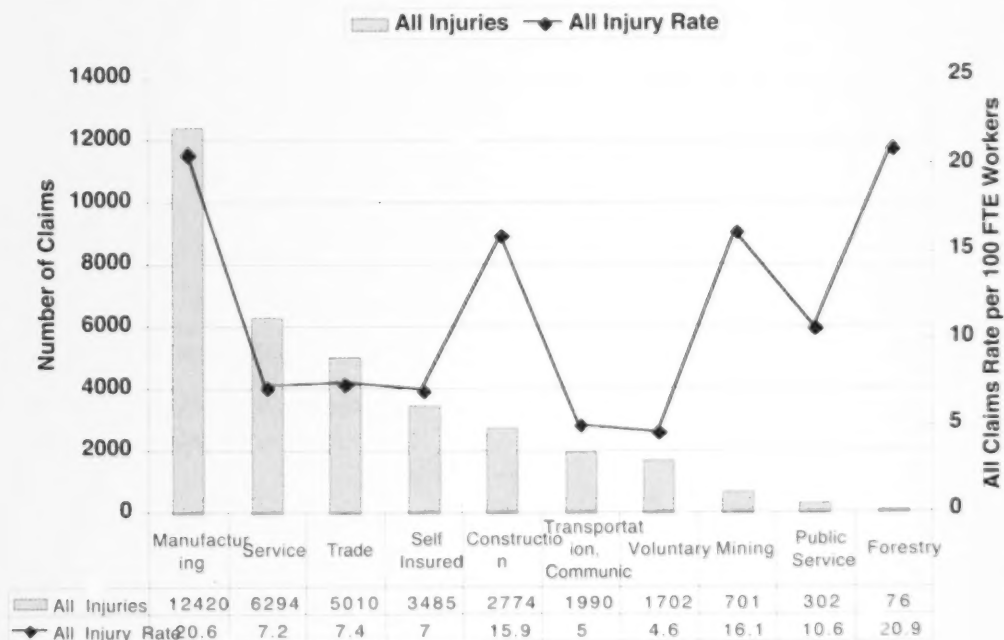


Figure 4.3.1 All Accepted Claims and All Injury Rate by Industry Group for 2002

4.4 *Characteristics of Claimants by Occupation (Accepted Time-Loss Claims)*

Claimants were most likely to be employed in various trades or as transport or equipment operators. These occupations produced 36% to 38% of claims in 2001 and 2002. In 2001, 24% of claimants were in processing and manufacturing occupations, and in 2002 this number was 21%. Sales and service occupations were represented by about 21% of claimants in both years. About 9% of claimants were in health-care occupations.

Women filed 86% of the claims coming from health-care workers. In addition, women reported more than half of the claims in the social sciences, education, art and culture. Men reported 80% or more of the claims in the natural sciences, trades and transport equipment, primary occupations, and processing manufacturing occupations.

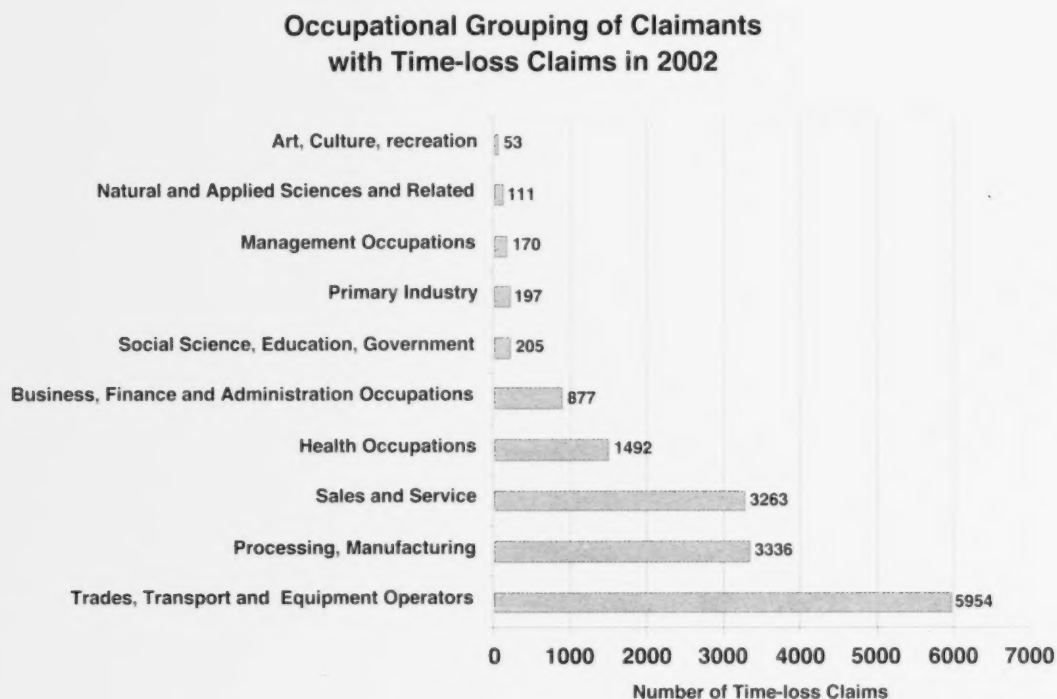


Figure 4.4.1 Occupational Groupings of Claimants

Table 4.4.1 Occupational Groupings of Claimants with Accepted Time-loss Injury Claims for Accident Year 2001 and 2002

All Occupations	2001		2002	
	Number of Time-loss Claims	Percent of Time-loss Claims	Number of Time-loss Claims	Percent of Time-loss Claims
Trades, Transport and Equipment Operators	6,089	35.9%	5,954	38%
Processing, Manufacturing	4,095	24.1%	3,336	21.3%
Sales and Service	3,547	20.9%	3,263	20.8%
Health Occupations	1,570	9.3%	1,492	9.5%
Business, Finance and Administration Occupations	992	5.8%	877	5.6%
Primary Industry	206	1.2%	197	1.3%
Social Science, Education, Government	156	0.9%	205	1.3%
Management Occupations	139	0.8%	170	1.1%
Natural and Applied Sciences and Related	126	0.7%	111	0.7%
Art, Culture, recreation	45	0.3%	53	0.3%
Not Coded	1,628	-	2,211	-
Total	18,593	100%	17,869	100%

4.5 Part of Body Injured for All Accepted Claims

This section provides details on all accepted claims sorted by the part of the body that was injured in the accident. Two methods of reporting the part of body injured are used. For many years, the WCB has used a coding system that assigns a letter of the alphabet to different parts of the body. The so-called "stickman" codes are a simple, first-level sorting of injured body parts and are reported in the WCB annual report. All claims are given stickman codes.

Time-loss claims are also sorted by codes developed by the Canadian Standards Association (the CSA Z795 coding system). This system provides additional details on injured body parts and is the standard coding methodology used by workers compensation authorities across Canada.

4.5.1 Part of Body Injured for All Accepted Claims ("Stickman Codes")

Hands and fingers were the most frequently injured body part in both 2001 and 2002 (at about 23% of all injured body parts). The second most frequent injuries were injuries to multiple body parts at 15% (usually this type of injury includes the back and another, nearby body parts) followed by the lower back (15%), legs (9%) and lower arms (9%).

Table 4.5.1.1 Accepted and Unadjudicated Claims by Part of Body Injured ("Stickman Codes") for Accident Year 2001 and 2002

Stickman code description	2001		2002	
	Frequency	Percent	Frequency	Percent
Hand / fingers	8,559	23.3%	8,017	22.8%
Multiple injury	5,478	14.9%	5,495	15.6%
Lower back	5,425	14.8%	5,155	14.6%
Lower leg	3,183	8.7%	3,139	8.9%
Lower arm	3,132	8.5%	2,969	8.4%
Eyes	2,901	7.9%	2,775	7.9%
Shoulder	1,481	4.0%	1,374	3.9%
Foot / toes	1,213	3.3%	1,127	3.2%
Miscellaneous	1,167	3.2%	969	2.8%
Ribs / chest	864	2.4%	809	2.3%
Head	742	2.0%	766	2.2%
Abdomen	496	1.4%	448	1.3%
Hearing	262	0.7%	373	1.1%
Other Body Parts/Codes	1,771	4.8%	1,773	5.0%
Not coded	25	-	27	-
Total	36,437	100%	34,843	100%

4.5.2 Accepted Time-Loss Injuries by Body Part (CSA Z795 Codes)

Using the Z795 codes developed by the Canadian Standards Association produces a different claims profile because these codes are applied only to time-loss claims. (Stickman codes are applied to all claims.) Injuries to fingers and eyes, which typically result in no-time-loss claims, virtually disappear as injured body parts when one looks only at time-loss claims.

Trunk injuries accounted for roughly 36% of accepted time-loss claims in both 2001 and 2002. Most trunk injuries were to the back and spine.

Injuries to the lower extremities accounted for about 15% of the time-loss injuries by part of body in both 2001 and 2002 and were comprised of injuries to the legs (7%), ankles/ feet (7%), or other lower extremities (about 1%).

Injuries to the upper extremities in 2001 and 2002 accounted for about one quarter of injuries and were most likely to fingers (12% in 2001 and 2002) or other upper extremities (10% and 11% respectively) followed by hands and wrists (4% and 3%).

Injuries to the head accounted for about 6% of the time-loss claims each year, and were most likely to eyes (4%) or other head injuries (2%).

Table 4.5.2.1 Part of Body Accepted Time-Loss Claims by Accident Year for 2001 and 2002 (Part of Body – CSA Z795 Coding)

Part of Body	2001		2002	
	Number of Time-loss claims	Percent of Time-loss Claims	Number of Time-loss claims	Percent of Time-loss Claims
Trunk	6,117	36.1%	6,416	36.4%
• <i>Back including spine and spinal cord</i>	4,455	26.3%	4,760	27.0%
• <i>Other trunk</i>	1,662	9.8%	1,656	9.4%
Upper Extremities	4,458	26.3%	4,536	25.8%
• <i>Hands/ wrists except fingers</i>	693	4.1%	556	3.2%
• <i>Fingers</i>	2,081	12.3%	2,045	11.6%
• <i>other upper extremities</i>	1,684	9.9%	1,935	11.0%
Lower Extremities	2,603	15.3%	2,758	15.7%
• <i>legs</i>	1,190	7.0%	1,247	7.1%
• <i>ankles/foot (not toes)</i>	1,204	7.1%	1,231	7.0%
• <i>other lower extremities</i>	209	1.2%	280	1.6%
Head	1,136	6.7%	1,141	6.4%
• <i>eyes</i>	738	4.4%	712	4.0%
• <i>other head</i>	398	2.3%	429	2.4%
Multiple body parts	2,278	13.4%	2,365	13.4%
Neck	198	1.2%	220	1.2%
Body systems	173	1.0%	152	0.9%
Part of body-unknown/ other	1		16	0.1%
Missing/ Not Coded	1,628		263	-
Total	18,593	100%	17,869	100%

4.6 Nature of Injury for Accepted Time-loss Claims

WCB coding attempts to capture the medical diagnosis (i.e., the physical characteristics of the disabling injury or illness) associated with each accepted time-loss claim. Information on the nature of injury or illness is only coded for accepted time-loss claims.

4.6.1 Nature of Injury for Accepted Time-Loss Claims (Major CSA Z795 Codes)

In 2002, traumatic injuries and disorders constituted 92% of claims, with sprains and strains accounting for 52%, surface wounds and burns accounting for 12% and open wounds accounting for 11%. Systemic diseases and disorders accounted for an additional 6% of time-loss claims in 2002.

Nature of Injury for Time-Loss Claims Accident Year 2002

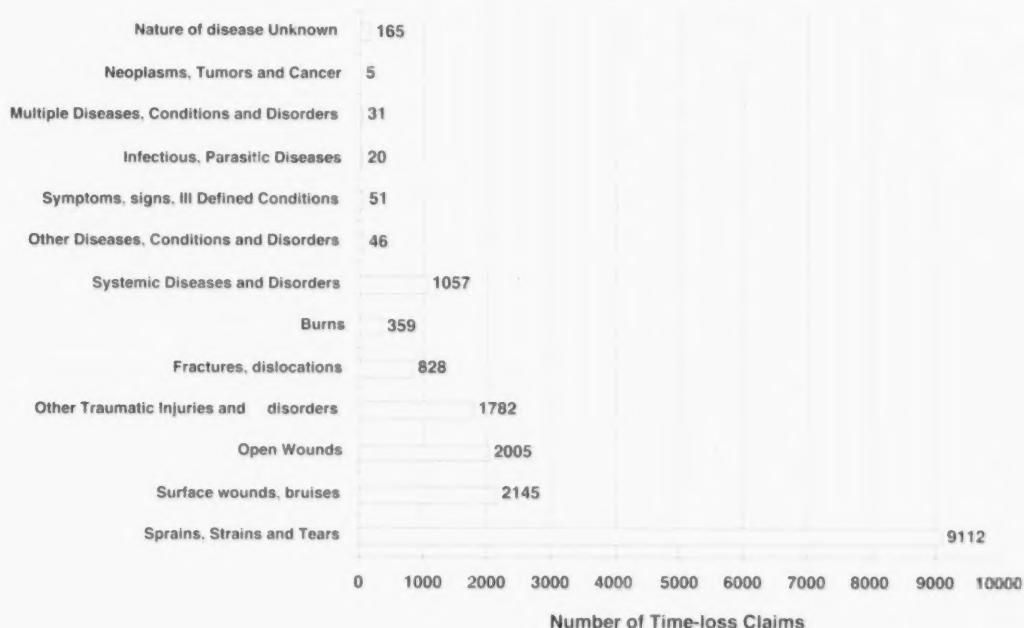


Figure 4.6.1.1 Nature of Injury for Accepted Time-Loss Claims for Accident Year 2002

Table 4.6.1.1 Nature of Injury or Disease for Accepted Time-Loss Claims For Accident Year 2001 and 2002

Nature of Injury or Disease	2001		2002	
	Number of Time-loss Claims	Percent of Time-loss Claims	Number of Time-loss Claims	Percent of Time-loss Claims
Traumatic Injuries and Disorders	16,752	93.0%	16,231	92.2%
• <i>Sprains, Strains and Tears</i>	8,774	48.7%	9,112	51.8%
• <i>Surface wounds, bruises</i>	2,285	12.7%	2,145	12.2%
• <i>Open Wounds</i>	2,167	12.0%	2,005	11.4%
• <i>Other Traumatic Injuries and disorders</i>	2,343	13.0%	1,782	10.1%
• <i>Fractures, dislocations</i>	770	4.3%	828	4.7%
• <i>Burns</i>	413	2.3%	359	2.0%
Occupational Diseases	1,068	6.6%	1,380	7.8%
• Systemic Diseases and Disorders	1,050	5.8%	1,057	6.0%
• Other Diseases, Conditions and Disorders	54	0.3%	46	0.3%
• Symptoms, signs, Ill Defined Conditions	76	0.4%	51	0.3%
• Infectious, Parasitic Diseases	21	0.1%	20	0.1%
• Multiple Diseases, Conditions and Disorders	4	0.0%	31	0.2%
• Neoplasms, Tumors and Cancer	4	0%	5	0.0%
• Nature of disease Unknown	61	0.3%	165	0.9%
Not Coded	571	-	263	-
Total	18,593	100%	17,869	100

4.6.2 Nature of Injury for Accepted Time-Loss Claims (Detailed CSA Z795 Codes)

This table represents the top 37 uncategorized diagnoses of nature of injury of disease in 2001 and 2002.

Table 4.6.2.1 Nature of Injury Accepted Time-Loss Claims by Accident Year 2001 and 2002

Z795 Nature Description	2001		2002	
	Frequency	Percent	Frequency	Percent
Sprains, strains, tears, unspecified, n.e.c.	8,626	48.1%	8,894	50.7%
Cuts, lacerations	1,740	9.7%	1,585	9.0%
Bruises, contusions	1,646	9.2%	1,576	9.0%
Fractures	667	3.7%	665	3.8%
Crushing injuries	522	2.9%	425	2.4%
Foreign bodies (superficial splinters, chips)	502	2.8%	423	2.4%
Multiple traumatic injuries and disorders, unspecified	1,123	6.3%	391	2.2%
Tendonitis	276	1.5%	277	1.6%
Punctures, except bites	303	1.7%	270	1.5%
Heat, Burns, Scalds	300	1.7%	228	1.3%
Back pain, hurt back	177	1.0%	224	1.3%
Other combinations of traumatic injuries and disorders, n.e.c.	40	0.2%	218	1.2%
Soreness, pain, hurt, except the back	192	1.1%	206	1.2%
Unknown	61	0.3%	165	0.9%
Epicondylitis	100	0.6%	135	0.8%
Carpal tunnel syndrome	135	0.8%	116	0.7%
Abrasions, scratches	50	0.3%	107	0.6%
Fractures and other injuries	26	0.1%	98	0.6%
Inguinal hernia	105	0.6%	98	0.6%
Traumatic tendonitis	56	0.3%	75	0.4%
Cuts, abrasions, bruises	81	0.5%	74	0.4%
Other poisonings and toxic effects, n.e.c.	99	0.6%	70	0.4%
Deafness, hearing Loss or Impairment	57	0.3%	68	0.4%
Dislocations	76	0.4%	64	0.4%
Welder's flash	72	0.4%	60	0.3%
Amputations, fingertip	58	0.3%	60	0.3%
Traumatic Injuries and Disorders Unspec.	-	-	57	0.3%
Concussions	41	0.2%	56	0.3%
Chemical burns, unspecified	86	0.5%	52	0.3%
Avulsions	23	0.1%	46	0.3%
Anxiety, stress, neurotic disorders, unspecified	54	0.3%	46	0.3%
Traumatic bursitis	37	0.2%	45	0.3%
Spasms or tremors, n.e.c.	67	0.4%	45	0.3%
Rotator cuff tear	22	0.1%	39	0.2%
Surface wounds and bruises, unspecified	78	0.4%	36	0.2%
Traumatic epicondylitis	87	0.5%	36	0.2%
Dermatitis, unspecified	51	0.3%	32	0.2%
Sciatica	16	0.1%	31	0.2%
"Other" Codes	273	1.5%	440	2.5%
Missing/ Not Coded	595	-	263	-
Total	18,593	100%	17,869	100%

4.7 Source of Injury for Accepted Time-Loss Claims

WCB coding also tries to capture the source of injuries and illnesses, that is, the substance or object that the worker was using or came into contact with at the time of the injury and which precipitated the injury and the time away from work.

4.7.1 Source of Injury (Detailed CSA Z795 Codes)

Of all source of injury categories, contact with persons, plants, animals and minerals precipitated about 40% of accepted time-loss injuries in 2001 and 2002. In some 33% of these cases, workers were injured without coming into contact with other persons or objects (i.e., they injured themselves through bodily motion and repetitive motion and also from stretching, bending, walking, running or tripping without falling).

Coming into contact with structures and surfaces was the source of injury of 14% of time-loss claims in 2001 and 2002. This includes workers who fell and thereby came into contact with the floor or ground.



Figure 4.7.1.1 Source of Injury for Accepted Time-Loss Claims for Accident Year 2002

Table 4.7.1.1 Source of Injury and Disease for Accepted Time-loss Claims by Accident Year 2001 and 2002

Primary Source of Injury	2001		2002	
	Number of Time-loss Claims	Percent of Time-loss Claims	Number of Time-loss Claims	Percent of Time-loss Claims
Persons, Plants, Animals and Minerals⁶	7,087	39.3%	7,070	40.2%
• <i>Persons- injured or ill worker</i>	5,655	31.4%	5,881	33.4%
• <i>Persons- other than injured worker</i>	1,143	6.3%	908	5.2%
• <i>Minerals- metallic or non-metallic</i>	55	0.3%	46	0.3%
• <i>Other Persons, plants, animals, minerals</i>	234	1.3%	235	1.3%
Structures and surfaces	2,439	13.5%	2,511	14.3%
Parts and Materials	2,083	11.6%	1,842	10.5%
Containers	1,601	8.9%	1,596	9.1%
Vehicles	725	4%	688	3.9%
Tools, Instruments and Equipment	1,158	6.4%	1,099	6.2%
• <i>Hand tools- non-powered</i>	738	4.1%	640	3.6%
• <i>Hand tools-powered</i>	295	1.6%	279	1.6%
• <i>Other-tools and equipment</i>	125	0.7%	180	1.0%
Machinery	937	5.2%	927	5.3%
Other Sources	918	5.1%	860	4.9%
Furniture and Fixtures	546	3%	524	3.0%
Chemicals and Chemical products	231	1.3%	208	1.2%
Source unknown	295	1.6	281	1.6%
Not Coded	573	-	263	-
Total	18,593	100%	17,869	100%

4.7.2 Source of Injury (Uncategorized CSA Z795 Codes)

Table 4.7.2.1 presents the top 40 sources of injury for 2001 and 2002.

⁶ This category includes injuries sustained due to the bodily motion of the injured worker, repetitive motions and injuries caused by coworkers or others such as health-care patients

Table 4.7.2.1 Detailed Source of Injury of Accepted Time-loss Claims for Accident Year 2001 and 2002

Source Description	2001		2002	
	Frequency	Percent	Frequency	Percent
Bodily motion or position of injured, ill worker	5,588	31.0%	5,825	33.1%
Ground	814	4.5%	851	4.8%
Health care patient or resident of health care facility	947	5.3%	757	4.3%
Floor of building	804	4.5%	639	3.6%
Boxes, crates, cartons	600	3.3%	579	3.3%
Knives	534	3.0%	429	2.4%
Unknown	295	1.6%	281	1.6%
Metal chips, particles	274	1.5%	255	1.4%
Doors	253	1.4%	215	1.2%
Floors, walkways, ground surfaces, unspecified	20	0.1%	204	1.2%
Cart, dolly, hand truck	214	1.2%	200	1.1%
Bags, sacks, totes	209	1.2%	187	1.1%
Skids, pallets	154	0.9%	161	0.9%
Machinery, unspecified	198	1.1%	148	0.8%
Dirt particles	173	1.0%	142	0.8%
Vehicle and mobile equipment parts, n.e.c.	186	1.0%	141	0.8%
Buckets, baskets, pails	182	1.0%	134	0.8%
Person-other than injured or ill worker, n.e.c.	175	1.0%	125	0.7%
Tables, worktables	144	0.8%	122	0.7%
Wood, lumber, unspecified	142	0.8%	115	0.7%
Tanks, bins, vats	81	0.4%	111	0.6%
Bars, rods, reinforcing bar (rebar)	156	0.9%	101	0.6%
Other machinery, n.e.c.	64	0.4%	99	0.6%
Other sources, n.e.c.	135	0.7%	87	0.5%
Metal materials-nonstructural, unspecified	89	0.5%	86	0.5%
Cabinets, cases-display, storage	121	0.7%	80	0.5%
Truck, unspecified	60	0.3%	79	0.4%
Nails, brads, tacks	107	0.6%	78	0.4%
Metal materials-nonstructural, n.e.c.	88	0.5%	78	0.4%
Semi trailer, tractor trailer, trailer truck	89	0.5%	79	0.4%
Noise	56	0.3%	70	0.4%
Food slicers	95	0.5%	70	0.4%
Water	67	0.4%	67	0.4%
Automobile	75	0.4%	66	0.4%
Parking lots	50	0.3%	63	0.4%
Sledges	69	0.4%	61	0.3%
Stairs, steps-indoors	106	0.6%	61	0.3%
Machine and appliance parts, n.e.c.	51	0.3%	60	0.3%
Plywood, wood paneling; particle, chip, flake board	91	0.5%	59	0.3%
Table saws	60	0.3%	56	0.3%
Metal sheets, ingots, bars-nonstructural	22	0.1%	56	0.3%
Other Sources	4,385	24.3%	4,529	25.7%
Not Coded	570	-	263	-
Total Sources	18,593	100%	17,869	100%

4.8 *Time-Loss Injuries by Event or Exposure (CSA Z795 Codes)*

Event codes classify the incident or event that caused the injury, or which created the exposure to disease. In other words, these codes attempt to indicate the way in which the incident occurred. Event codes are entered for accepted time-loss claims only.

4.8.1 Time-Loss Injuries by Event or Exposure (Categorized CSA Z795 Codes)

Injuries resulting from bodily reactions (about 27%-29%) and over exertion (about 17%-19%) made up about half of time-loss claims in 2001 and 2002, and were the major type of event.

Contact with objects or equipment resulted in 29%-30% of events or exposures. Falls from height or falls on one level made up roughly 13% of the time-loss claims in 2001 and 2002.

Table 4.8.1.1 Type of Event or Exposure for Accepted Time-loss Claims by Accident Year 2001 and 2002

Type of Event or Exposure	2001		2002	
	Number of Time-loss Claims	Percent of Time-loss Claims	Number of Time-loss Claims	Percent of Time-loss Claims
Bodily Reaction and Exertion	8,391	49.9%	8,884	50.5%
• <i>Overexertion</i>	3,388	18.8%	3,036	17.2%
• <i>Bodily reaction</i>	4,937	27.4%	5,080	28.9%
• <i>Repetitive motions</i>	640	3.6%	707	4.0%
• <i>Other bodily Reaction and Exertion</i>	21	0.1%	61	0.3%
Contact with Objects, Equipment	5,184	30.3%	5,065	28.7%
• <i>Struck by objects</i>	2,623	14.6%	2,522	14.3%
• <i>struck against objects</i>	1,377	7.6%	1,222	6.9%
• <i>caught in objects</i>	905	5.0%	867	4.9%
• <i>Rubbed or abraded</i>	552	3.1%	438	2.5%
• <i>Other contact with objects or equipment</i>	4	0.0%	16	0.1%
Falls	2,118	12.3%	2,359	13.4%
• <i>Fall on Same level</i>	1,424	7.9%	1,570	8.9%
• <i>Fall from height</i>	802	4.4%	766	4.4%
• <i>Other Falls</i>	1	0.0%	23	0.1%
Transportation Incidents	236	1.3%	252	1.4%
Exposure to Harmful Substances	831	4.6%	739	3.8%
Assaults and Violent Acts	198	1.3%	201	1.1%
• <i>Assaults and violent acts by persons</i>	194	1.1%	180	1.0%
• <i>Other assaults and violent acts</i>	29	0.2%	21	0.1%
Fires and Explosions	11	0.1%	18	0.1%
Event Unknown/Missing	48	0.3%	88	0.5%
Not Coded	570	-	263	-
Total	18,593	100%	17,869	100%

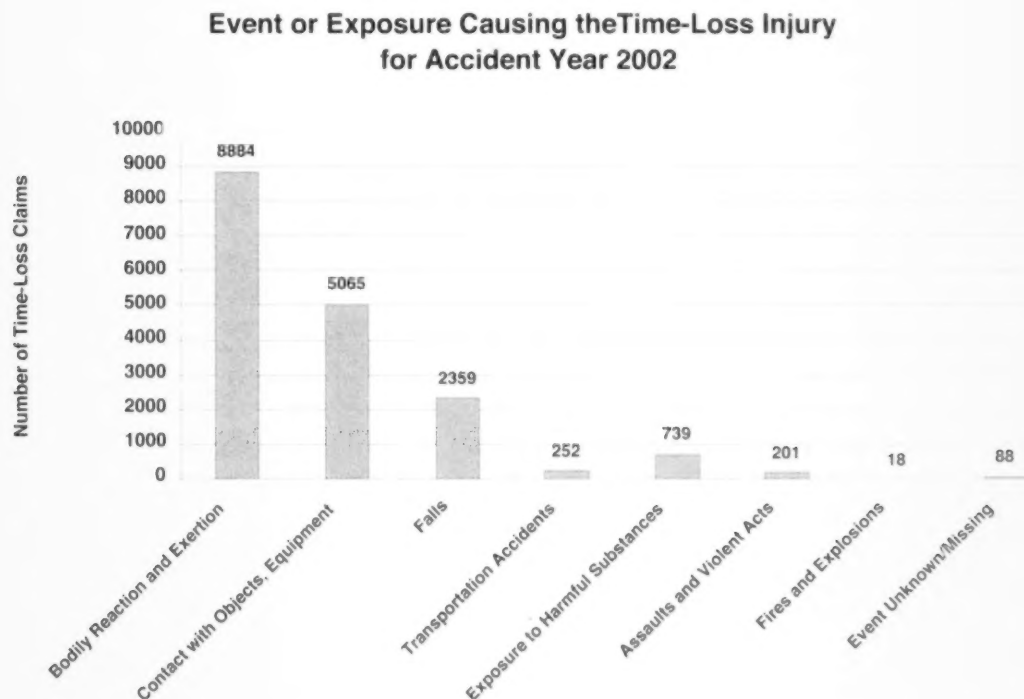


Figure 4.8.1.1 Event for Accepted Claims for Accident Year 2002

4.8.2 Time-Loss Injuries by Event or Exposure (Categorized CSA Z795 Codes)

Table 4.8.2 lists the top 28 uncategorized events or exposures that resulted in accepted time-loss injury or disease claims.

Table 4.8.2.1 Accepted Time-loss Claims by Event or Exposure for Accident Year 2001 and 2002

Event Description	2001		2002	
	Frequency	Percent	Frequency	Percent
Bending, climbing, crawling, reaching, twisting	3,800	21.4%	3,532	20.2%
Overexertion in lifting	2,550	14.4%	2,353	13.5%
Fall to floor, walkway, or other surface	1,106	6.2%	1,265	7.3%
Struck against stationary object	997	5.6%	916	5.3%
Struck by slipping handheld object	924	5.2%	737	4.2%
Struck by falling object	896	5.1%	704	4.0%
Struck by object, n.e.c.	343	1.9%	675	3.9%
Bodily reaction, n.e.c.	237	1.3%	485	2.8%
Caught in or compressed by equipment or objects, n.e.c.	235	1.3%	435	2.5%
Overexertion in pulling or pushing objects	484	2.7%	427	2.4%
Rubbed or abraded by foreign matter in eye	501	2.8%	420	2.4%
Repetitive motion, n.e.c.	292	1.6%	414	2.4%
Slipping on something without fall	480	2.7%	398	2.3%
Bodily reaction, unspecified	270	1.5%	330	1.9%
Fall onto or against objects	315	1.8%	293	1.7%
Contact with hot objects or substances	295	1.7%	277	1.6%
Caught in running equipment or machinery	287	1.6%	219	1.3%
Compressed or pinched by rolling, sliding, or shifting objects	368	2.1%	191	1.1%
Fall to lower level, n.e.c.	120	0.7%	177	1.0%
Fall down stairs or steps	193	1.1%	163	0.9%
Fall from ladder	169	1.0%	155	0.9%
Repetitive placing, grasping, or moving objects, except tools	206	1.2%	145	0.8%
Fall from nonmoving vehicle	172	1.0%	130	0.7%
Contact with skin, eye(s) or other exposed tissue	187	1.1%	126	0.7%
Overexertion, n.e.c.	224	1.3%	123	0.7%
Tripping over something without fall	136	0.8%	106	0.6%
Struck by or slammed in swinging door or gate	123	0.7%	102	0.6%
Other Event Codes	1,821	10.3%	2,146	12.3%
Not Coded	862	-	425	-
Total	18,593	100%	17,869	100%

4.9 Musculoskeletal Injuries

Musculoskeletal injuries include sprains, strains, tears, back pain, carpal tunnel and other musculoskeletal or connective tissue diseases and disorders which result in time-loss claims. These injuries often occur as a result of improper or inadequate workplace design or processes (ergonomic conditions). Proper ergonomic practices could prevent many of these types of injuries.

More than 50% of the accepted time-loss injuries are musculoskeletal injuries. The bulk of these are strains and sprains followed by repetitive strain, back pain and carpal tunnel.

Table 4.9.1 Musculoskeletal Injuries (MSI) for Accepted Time-loss Claims For Accident Year 2001 and 2002

Type of Injury	2001		2002	
	Number of Time-loss claims	% of time-loss Claims	Number of Time-loss claims	% of time-loss Claims
Musculoskeletal Injuries	9,626	53.3%	9,991	57.3%
• Strains and Sprains	8,765	48.6%	9,063	51.5%
• Back pain/hurt back	177	1.0%	224	1.3%
• Carpal Tunnel	135	0.7%	116	0.7%
• Repetitive Strain	549	3.0%	588	3.3%
Non- MSI	8,397	46.6%	7,615	43.3%
Not Coded	570	-	263	-
Total	18,593	100%	17,869	100%

**Musculoskeletal Injuries for
Accepted Time-Loss Claims in 2002**

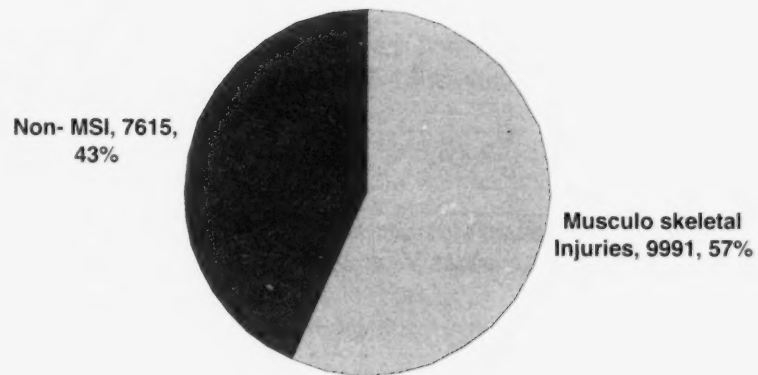


Figure 4.9.1 Musculoskeletal Injuries for Accepted Time-Loss Claims in 2002

5.0 TERMS AND DEFINITIONS

Age: the worker's age at date of injury.

All-Injury Rate: The all-injury rate represents the number of WCB-accepted claims per 100 full-time equivalent workers in a calendar year. This rate represents the risk of workplace injury or disease to a worker over a one-year period.

Full-time equivalent workers are estimated based on gross payrolls submitted by covered employers and matching Statistics Canada wage-rate data. The injury rate is then calculated by dividing the number of accepted WCB time-loss and no-time-loss claims in a calendar year by the estimated number of full-time equivalent workers and multiplying that result by 100.

$$\text{All-injury rate} = \frac{\text{Number of WCB time-loss and no-time-loss claims in a calendar year} * 100}{\text{Estimated number of full-time equivalent workers}}$$

CSA Z795-96 standard: Many of the details surrounding the circumstances of the injury are coded using the Canadian Standards Association (CSA) guidelines for coding occupational injury and disease information (the CSA Z795-96 standard).

Event or Exposure: the manner in which the injury or disease was produced or influenced by the identified source (e.g., repetitive motion, fall, caught in machinery, etc.).

Full-Time Equivalent Worker: A full-time worker represents the equivalent of 52 paid weeks of employment, whether worked by one individual or several. Full-time equivalent workers are estimated based on the gross annual payroll submitted by covered employers in an industry and Statistics Canada average weekly wage-rate data appropriate to that industry. This method of estimating full-time equivalent workers is in accordance with a convention established by the Association of Workers' Compensation Boards of Canada (AWCBC) and adopted by the Manitoba WCB.

$$\text{Full-Time Equivalent Worker} = \frac{\text{Firm Payroll}}{(\text{Average Weekly Earnings} * 52)}$$

Industry Classification: The industry groups displayed in the tables are derived from the classification system used for determining WCB assessments for employers (rate code groups). Rate code groups contain employers whose workplaces experience similar levels of risk. The industry categories are similar to, but not identical to, Statistics Canada's method of classifying industries. The federal agency uses the North American Industry Classification System (NAICS).

Musculoskeletal Injuries (MSIs): "musculoskeletal injuries" or "MSIs" are injuries to or disorders of the muscles, tendons, ligaments, joints, nerves, blood vessels or

related soft tissue including a sprain, strain and inflammation. Such injuries may be caused or aggravated by work.

Nature of Injury or Disease: the principal characteristic of the injury or disease (e.g., amputation, sprain and strain, cut, etc.).

No-Time-Loss Claims: No-time-loss claims include claims where no time at work is lost due to the workplace accident and the worker is receiving health-care benefits. Within this category, the WCB includes no-cost claims which are claims that are accepted but have no costs associated with them when adjudicated.

Occupation: a worker's occupation at the time of the injury or either the onset of an occupational disease or the onset of a loss of earnings brought on by an occupational disease.

Part of Body: part of body directly affected by the nature of injury or disease (e.g., eye, finger, etc.)

Source of Injury or Disease: identifies the object, substance, exposure or bodily motion that directly produced or inflicted the injury or disease (e.g., knife, table saw, vehicles, etc.)

Time-Loss Claims: Time-loss claims include claims where time at work is lost beyond the day of accident due to a workplace injury or illness, fatalities and claims where a worker is granted a permanent impairment award. Starting the day following the injury, the WCB will replace the wages the worker lost as a result of the injury.

Time-Loss Injury Rate: The time-loss injury rate represents the number of WCB-accepted time-loss claims per 100 full-time equivalent workers. This rate represents the risk to a worker of a time-loss workplace injury or disease in a calendar year.

Full-time equivalent workers are estimated based on gross payrolls submitted by covered employers and matching Statistics Canada wage-rate data. The injury rate is then calculated by dividing the number of accepted WCB time-loss and no-time-loss claims in a calendar year by the estimated number of full-time equivalent workers and multiplying that result by 100.

$$\text{Time-loss injury rate} = \frac{\text{Number of WCB time-loss claims in a calendar year} * 100}{\text{Estimated number of full-time equivalent workers}}$$

5.1 *Definitions and Sources of Identification for Fatalities*

Inclusion Criteria:

This report attempts to include all deaths that occur in Manitoba as a result of an exposure to a hazard in the workplace.

Fatalities are included in this report when:

1. The Workers Compensation Board accepts a claim involving a fatality and determines that the death was the result of a workplace injury or illness. WCB-accepted fatalities are included regardless of where a death has occurred (i.e., a trucker who is killed while hauling out of province is included).
2. Manitoba Public Insurance accepts a claim involving a fatality and determines that the death was the result of a workplace injury or illness.
3. A death occurs in a non-WCB covered workplace and the Workplace Safety and Health Division of Manitoba Labour and Immigration investigates and determines that the death was the result of a workplace injury or illness.
4. The Royal Canadian Mounted Police investigates a fatality and determines that the death was the result of a workplace injury or illness.
5. A death occurs on a farm and falls under the inclusion criteria of the Canadian Agriculture Injury Surveillance Program.
6. The Office of the Chief Medical Examiner determines that a death the death was the result of a workplace injury or illness.

Definitions: For the purpose of workplace fatality surveillance, the following definitions are in use.

1. **Worker** – A worker is defined as a person in a position of employment performing any work which comes under the jurisdiction of the WCB of Manitoba, the Workplace Safety and Health Division of Manitoba Labour and Immigration or Human Resources Development Canada.
2. **Workplace** – A workplace is defined as any location where a worker is performing his or her assigned work. This includes the “highway” in the case of workers whose death occurred while they were travelling if travelling is part of their required duties.
3. **By-stander** – A by-stander is defined as a person who is killed in a “workplace”, including a highway, as the result of a hazard of the workplace, but was not working for or in that workplace at the time of death.

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4. **Acute-hazard exposure death** – This is a work-related fatality that occurs when a worker is injured or exposed to a significant amount of a hazardous agent. In such cases, the worker dies immediately or soon after the exposure. This category includes such deaths as falls from height, drowning, highway crashes, and chemical poisoning. It excludes deaths due to infectious agents.
 5. **Work-related disease death** – This is a work-related fatality that occurs when a worker develops a disease as the result of a long-term exposure to a hazardous substance or contact with a disease-causing agent. In such cases, the worker dies after months or years have passed. This category also includes traumatic or single events that have precipitated a functional failure such as a myocardial infarction or an acute carbon monoxide inhalation.

Sources of Identification:

The Workplace Safety and Health Division of Manitoba Labour and Immigration is responsible for tracking the occurrence of fatalities in Manitoba workplaces. Since 2000, closer partnerships have been established with other provincial agencies in an effort to enhance this monitoring system. This has resulted in a process of accessing multiple data sources for the identification of workplace fatalities. The following sources currently contribute to the workplace fatality surveillance program.

- A. Workplace Safety and Health Division
- B. Workers Compensation Board of Manitoba
- C. Office of the Chief Medical Examiner
- D. Manitoba Department of Highways
- E. Royal Canadian Mounted Police
- F. Media clippings – daily review of local papers and electronic media.